WO 2005/004668 PCT/NZ2004/000151

Claims

5

10

15

1. A pack which includes a sac, an internal frame for the sac, a shoulder harness and a hip belt;

wherein the frame includes a pair of spaced flexible rods positioned one on each side of the frame so as to extend down at least the lower part of the length of each side of the sac;

and wherein tensioning means are secured between each flexible rod at or adjacent the end of said flexible rod, and an adjacent portion of the hip belt; each said tensioning means being adapted to move the corresponding flexible rod so as to bow and tension said rod and provide a relatively rigid weight transmitting connection between said rod and the corresponding portion of the hip belt; the arrangement being such that said movement of said flexible rods tends to lift the frame and the pack, decreasing the loading on the shoulder harness and increasing the loading on the belt.

- 2. The pack as claimed in claim 1, wherein said frame is a skeleton frame made of rod or bar.
- 20 3. The pack as claimed in claim 1 or claim 2, wherein the frame consists of a pair of spaced U-shaped portions inclined at an acute angle to each other and secured together, and spaced apart, by one or more crossbars, the inner legs of said U-shaped portions being secured together by a looped portion, and the outer leg of each U-shaped portion being secured to one of said flexible rods.

25

4. The pack as claimed in any one of the preceding claims, wherein each tensioning means comprises a strap secured at or adjacent the end of the corresponding flexible rod, the other end of said strap extending through an adjustment buckle.

30

- 5. The pack as claimed in any one of the preceding claims wherein the end of each flexible rod lies within a wing formed upon the lower side portion of the sac.
- $_{35}$ 6. The pack as claimed in any one of claims 1 4, wherein the end of each flexible rod lies within the hip belt.